OBSERVATIONS & RECOMMENDATIONS

After reviewing data collected from **RUST POND** the program coordinators recommend the following actions.

FIGURE INTERPRETATION

- Figure 1: These graphs illustrate concentrations of chlorophyll-a in the water column. Algae are microscopic plants that are a natural part of lake ecosystems. Algae contain chlorophyll-a, a pigment necessary for photosynthesis. A measure of chlorophyll-a can indicate the abundance of algae in a lake. The historical data (the bottom graph) show a *stable* in-lake chlorophyll-a trend. Chlorophyll concentrations remained low this season, and have been well below the NH mean reference line for 12 years! While algae are present in all lakes, an excess amount of any type is not welcomed. Concentrations can increase when there are external and internal sources of phosphorus, which is the nutrient algae depend upon for growth. It's important to continue the education process and keep residents aware of the sources of phosphorus and how it influences lake quality.

- Figure 2: Water clarity is measured by using a Secchi disk. Clarity, or transparency, can be influenced by such things as algae, sediments from erosion, and natural colors of the water. The graphs on this page show historical and current year data. The lower graph shows a *stable* trend in lake transparency. Water clarity was consistent with last season's, and the increase in rain this season did not have a negative effect on the transparency of Rust Pond. The 2000 sampling season was considered to be wet and, therefore, average transparency readings are expected to be slightly lower than last year's readings. Higher amounts of rainfall usually cause more eroding of sediments into the lake and streams, thus decreasing clarity.

- Figure 3: These figures show the amounts of phosphorus in the epilimnion (the upper layer in the lake) and the hypolimnion (the lower layer); the inset graphs show current year data. Phosphorus is the limiting nutrient for plants and algae in New Hampshire waters. Too much phosphorus in a lake can lead to increases in plant growth over time. These graphs show a *fairly stable* trend for in-lake phosphorus levels. May phosphorus concentrations were higher in

the epilimnion possibly as a result of watershed runoff with the spring rain. Results were back to normal in July and August. Mean phosphorus concentrations for both layers have remained below the median for NH lakes for several years. One of the most important approaches to reducing phosphorus levels is educating the public. Humans introduce phosphorus to lakes by several means: fertilizing lawns, septic system failures, and detergents containing phosphates are just a few. Keeping the public aware of ways to reduce the input of phosphorus to lakes means less productivity in the lake. Contact the VLAP coordinator for tips on educating your lake residents or for ideas on testing your watershed for phosphorus inputs.

OTHER COMMENTS

- The Rust Pond grant proposal for a diagnostic study was accepted to receive funding. A lake and watershed diagnostic study is set to begin in late spring or early summer 2001.

- As part of the state's lake trophic classification program, DES biologists performed a comprehensive lake survey on Rust Pond. All public lakes in the state are surveyed every ten to fifteen years. In addition to the tests normally carried out by VLAP, biologists tested for important metals, forms of nitrogen, created a map of the bottom contours of the lake (bathymetry), and mapped the abundance and distribution of aquatic plants along the shores. For a complete copy of the raw data from the survey, please contact the DES Biology Section at (603) 271-2963. A final report should be available in 2002 and a copy can be found at any state library.

- Dissolved oxygen was again high at all depths of the lake (Table 9) in May this season. As stratified lakes age, oxygen is depleted in the lower layer by the process of decomposition. This process occurs as the summer progresses and by August oxygen is probably depleted below the critical level of 1.0 mg/L as it was in 1997. During the Diagnostic Study the lake will be sampled monthly, including dissolved oxygen and plankton sampling.

- Two new sites were tested along North End Inlet. In May a site across the street from the North End at Crossroads site, which we called South End at Crossroads, was sampled for the first time. The results were relatively consistent with those of the North site. The phosphorus concentration of the south side was slightly higher, however the water was stagnant and more turbid, which could raise phosphorus levels. The North End Beyond Beaver Dam was also a new site sampled. Conductivity, and pH were consistent with that of the downstream site. The turbidity of the sample was high and monitors noted that the water had and oily film and was dirty. This is typical of an area where there is no flow and water is stagnant. Please remember to only test water that has sufficient flow.

- *E. coli* originates in the intestines of warm-blooded animals (including humans) and is an indicator of associated and potentially harmful pathogens. Bacteria concentrations were very low at all the sites tested (Table 12), and there were not high readings similar to those of last season. If residents are concerned about septic system impacts, testing when the water table is high or after rains is best. Please consult the Other Monitoring Parameters section of the report for the current standards for *E. coli* in surface waters.

- Overall, phosphorus concentrations were high for the pond in May (Table 8). It seems that spring rain and snowmelt bring excess nutrients into the pond. These nutrients can cause algae blooms similar to those seen last season; however, there were no algal blooms apparent in May. The dominant algae in the plankton sample (Table 2) were the diatoms *Rhizosolenia* and *Asterionella,* and the filamentous green alga *Mougeotia.* These species are not toxic and were not overly abundant in the lake, indicating that they were not at nuisance levels.

NOTES

- Monitor's Note (5/17/00): Sampled North End Inlet right below beaver dam where there was flow. At Crossroads, sample both sides of road where there was flow, but water looked stagnant to and from culvert.

- Monitor's Note (7/6/00): North End Inlet no flow, no sample taken.

- Monitor's Note (8/25/00): Sample taken at North End Inlet (at request of abutter), in area backed up by beaver dam. Area looked oil-like and generally dirty. Samples of weed growing in North End Inlet.

- Biologist's Note (8/25/00): Weeds identified as *Chara* (macroscopic algae), *Potamogeton* (pondweed), and *Eriocaulon* (pipewort).

USEFUL RESOURCES

Stormwater Management and Erosion and Sediment Control Handbook. NHDES, Rockingham County Conservation District, USDA Natural Resource Conservation Service, 1992. (603) 679-2790.

Beavers and Their Control. UNH Cooperative Extension/NH Fish and Game, 1990. (603) 862-2346, or ceinfo.unh.edu

Save Our Streams Handbook for Wetlands Conservation and Sustainability. (800) BUG-IWLA, or visit www.iwla.org

A Brief History of Lakes, NH Lakes Association pamphlet, (603) 226-0299 or www.nhlakes.org

In Our Backyard. 1994. Terrence Institute, 4 Herbert St., Alexandria, VA. 22305, or call (800) 726-5253, or www.terrene.org

Effects of Phosphorus on New Hampshire's Lakes, NH Lakes Association pamphlet, (603) 226-0299 or www.nhlakes.org

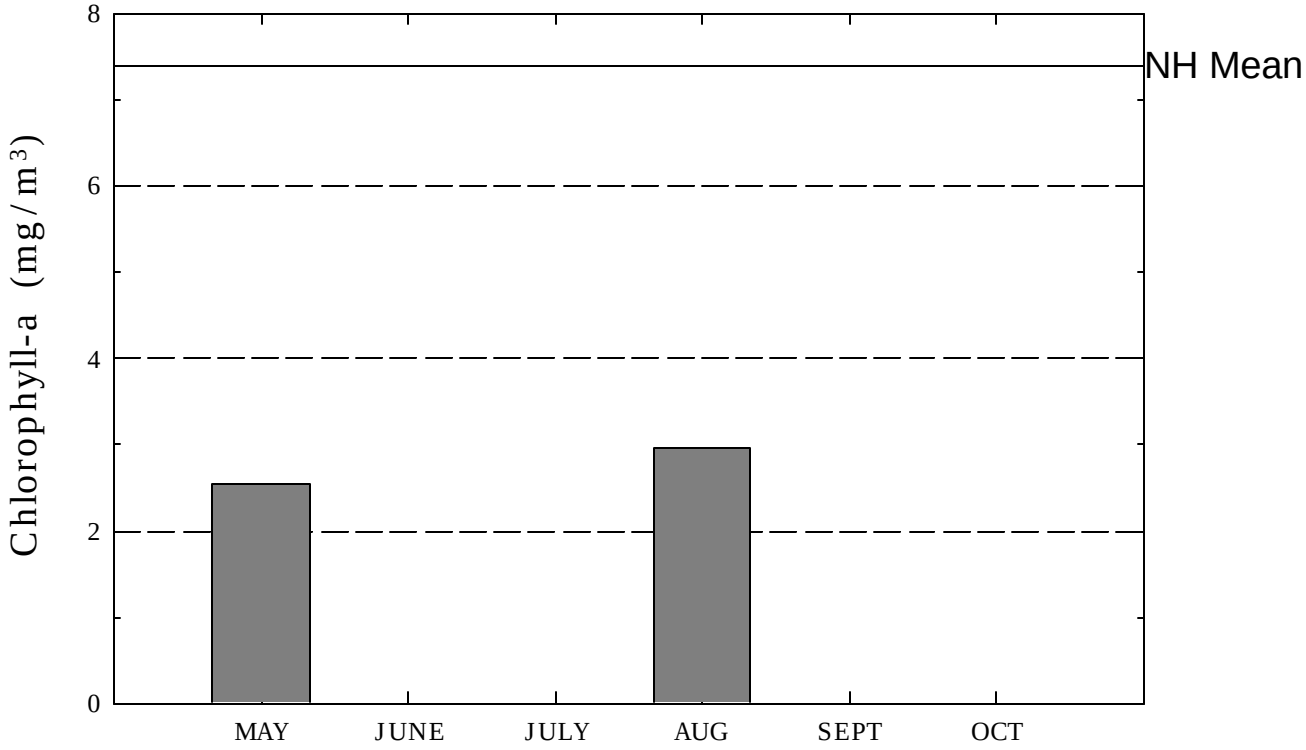
Handle With Care: Your Guide to Preventing Water Pollution. Terrene Institute, 1991. (800) 726-5253, or www.terrene.org

The Watershed Guide to Cleaner Rivers, Lakes, and Streams, Connecticut River Joint Commissions, 1995. (603) 826-4800

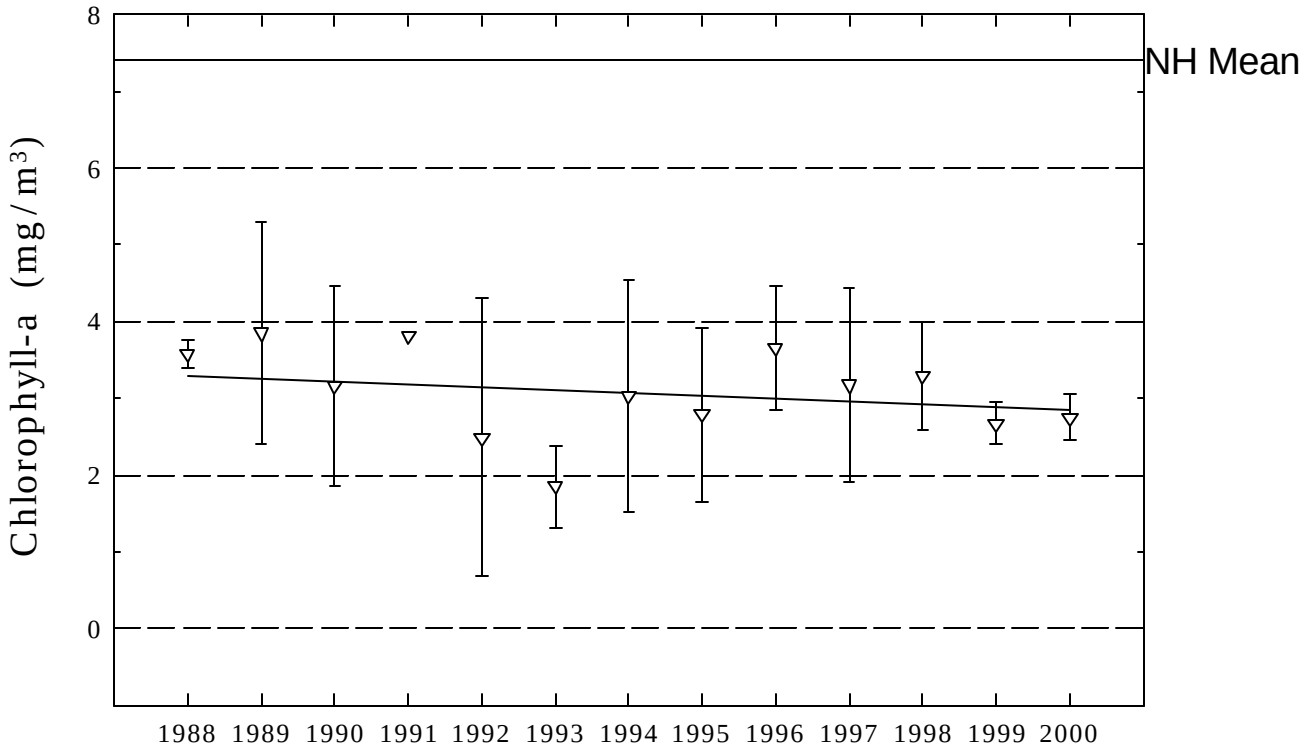
Through the Looking Glass: A Field Guide to Aquatic Plants. North American Lake Management Society, 1988. (608) 233-2836 or www.nalms.org

Rust Pond

Figure 1. Monthly and Historical Chlorophyll-a Results



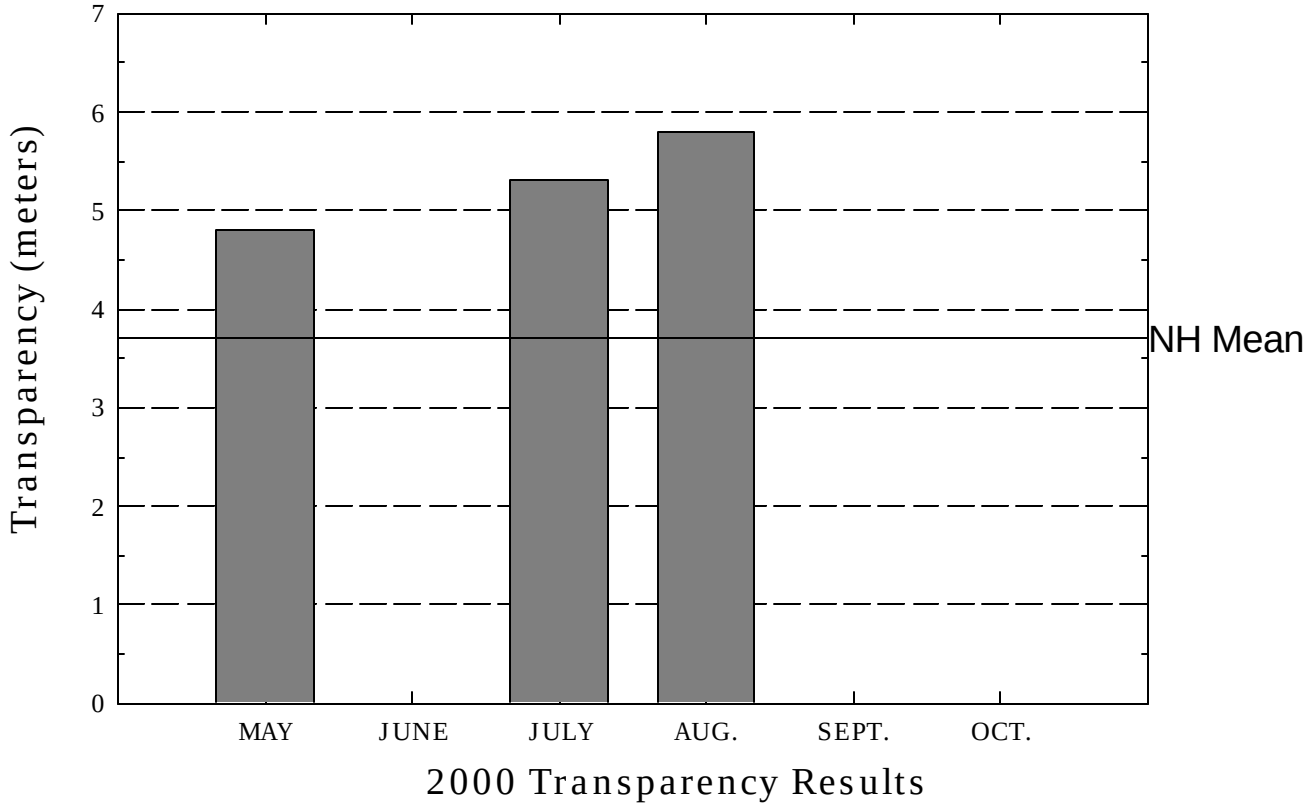
2000 Chlorophyll-a Results

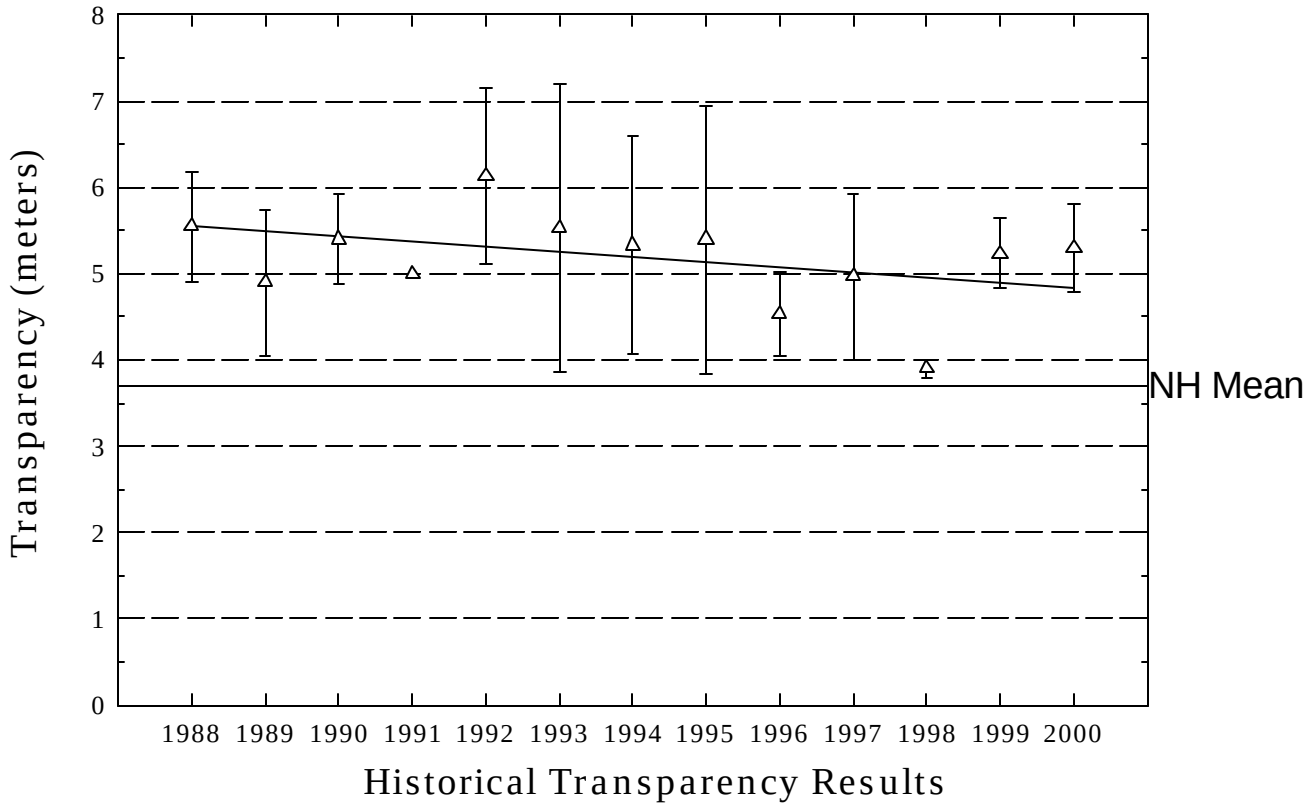


Historical Chlorophyll-a Results

Rust Pond

Figure 2. Monthly and Historical Transparency Results





Rust Pond

Figure 3. Monthly and Historical Total Phosphorus Data.

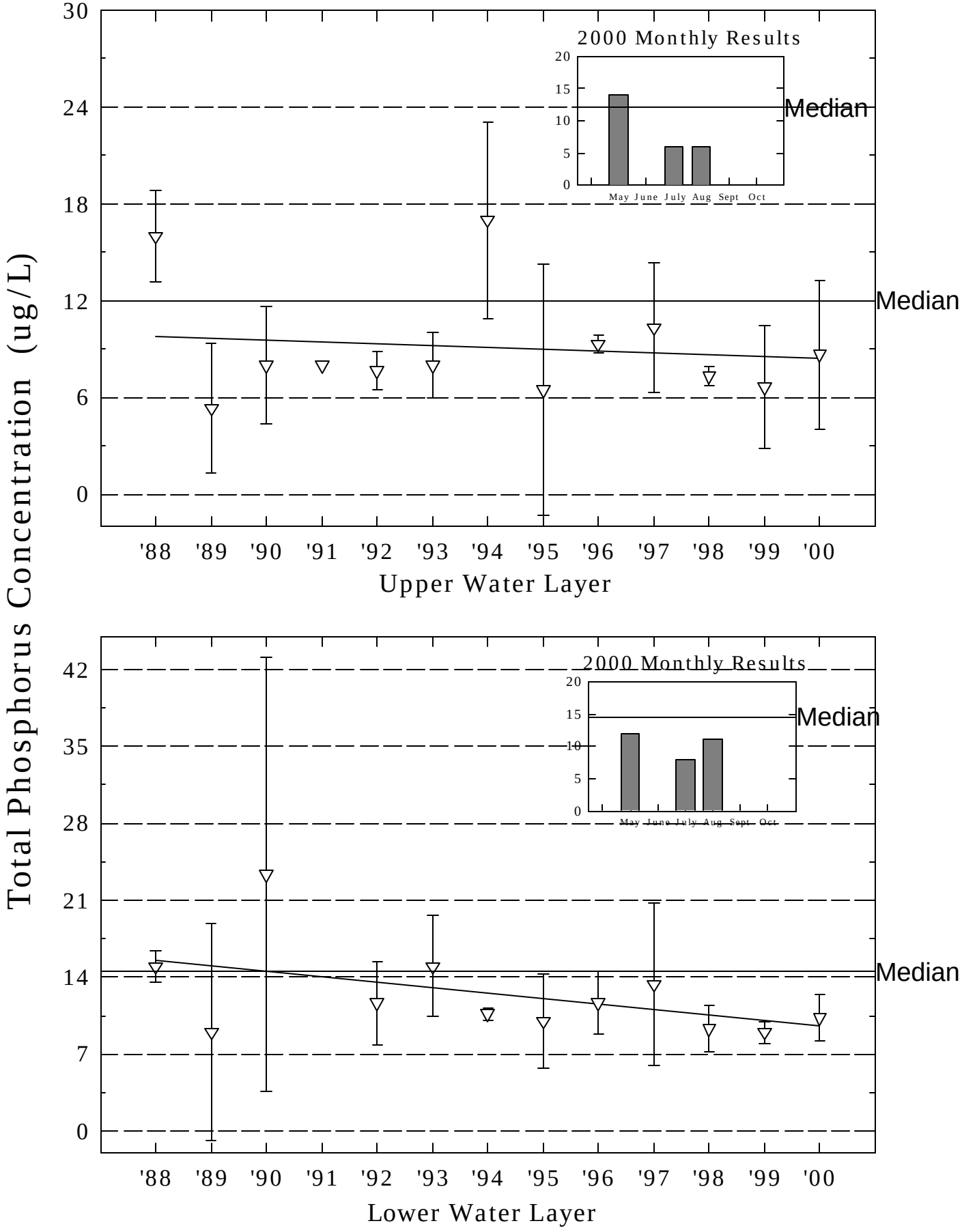


Table 1.

RUST POND
WOLFEBORO

Chlorophyll-a results (mg/m^3) for current year and historical sampling periods.

Year	Minimum	Maximum	Mean
1988	3.46	3.71	3.58
1989	2.93	5.53	3.85
1990	2.25	4.09	3.17
1991	3.82	3.82	3.82
1992	1.28	4.58	2.49
1993	1.26	2.31	1.85
1994	1.97	4.77	3.03
1995	1.99	3.59	2.79
1996	2.92	4.53	3.65
1997	2.18	4.60	3.17
1998	2.39	4.01	3.28
1999	2.37	2.92	2.67
2000	2.54	2.96	2.75

Table 2.

RUST POND

WOLFEBORO

Phytoplankton species and relative percent abundance.

Summary for current and historical sampling seasons.

Date of Sample	Species Observed	Relative % Abundance
06 / 27 / 1988	TABELLARIA	39
	ASTERIONELLA	27
	RHIZOSOLENIA	22
07 / 24 / 1989	DINOBRYON	53
	ASTERIONELLA	
	RHIZOSOLENIA	
07 / 25 / 1990	ASTERIONELLA	44
	TABELLARIA	29
	DINOBRYON	21
07 / 03 / 1991	TABELLARIA	85
06 / 25 / 1992	ASTERIONELLA	38
	CERATIUM	25
	DINOBRYON	16
06 / 16 / 1993	ASTERIONELLA	75
	DINOBRYON	10
06 / 08 / 1994	DINOBRYON	41
	UROGLENOPSIS	13
	ANABAENA	11
05 / 26 / 1995	DINOBRYON	38
	ASTERIONELLA	37
	TABELLARIA	18
05 / 21 / 1996	RHIZOSOLENIA	76
	ASTERIONELLA	16
	DINOBRYON	3
06 / 09 / 1997	ASTERIONELLA	89
	TABELLARIA	6
	MELOSIRA	1
08 / 28 / 1997	ANABAENA	50
	GEMINELLA	12
	TABELLARIA	11

Table 2.

RUST POND

WOLFEBORO

Phytoplankton species and relative percent abundance.

Summary for current and historical sampling seasons.

Date of Sample	Species Observed	Relative % Abundance
05 / 14 / 1998	ASTERIONELLA	73
	MELOSIRA	18
	DINOBRYON	7
07 / 12 / 1998	CERATIUM	17
	ANABAENA	16
	UROGLENOPSIS	13
08 / 16 / 1998	ASTERIONELLA	40
	ANABAENA	23
	FRAGILARIA	15
05 / 25 / 1999	TABELLARIA	73
	ASTERIONELLA	10
	RHIZOSOLENIA	6
05 / 17 / 2000	RHIZOSOLENIA	35
	ASTERIONELLA	32
	MOUGEOTIA	24

Table 3.

RUST POND

WOLFEBORO

Summary of current and historical Secchi Disk transparency results (in meters).

Year	Minimum	Maximum	Mean
1988	5.1	6.0	5.5
1989	4.3	5.5	4.9
1990	5.0	6.0	5.4
1991	5.0	5.0	5.0
1992	5.0	7.0	6.1
1993	3.6	6.5	5.5
1994	4.0	6.5	5.3
1995	4.3	6.5	5.4
1996	4.2	5.1	4.5
1997	4.1	6.0	4.9
1998	3.8	4.0	3.9
1999	5.0	5.7	5.2
2000	4.8	5.8	5.3

Table 4.

RUST POND

WOLFEBORO

pH summary for current and historical sampling seasons.
Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
DAM OUTLET				
	1994	7.41	7.41	7.41
EPILIMNION				
	1988	7.23	7.33	7.28
	1989	6.80	7.38	7.05
	1990	7.33	7.48	7.37
	1991	7.43	7.43	7.43
	1992	7.00	7.34	7.17
	1993	7.03	7.47	7.24
	1994	7.32	7.36	7.34
	1995	6.97	7.60	7.18
	1996	6.60	7.20	6.84
	1997	7.27	7.44	7.36
	1998	7.07	7.51	7.29
	1999	6.98	7.23	7.09
	2000	6.96	7.26	7.07
FRASIERS				
	1998	7.40	7.40	7.40
GRAB SOUTHWEST				
	1998	7.23	7.23	7.23
HYPOLIMNION				
	1988	6.58	6.62	6.60
	1989	6.32	6.86	6.59
	1990	6.36	7.25	6.57

Table 4.

RUST POND

WOLFEBORO

pH summary for current and historical sampling seasons.
Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
	1991	6.45	6.45	6.45
	1992	6.82	7.17	6.94
	1993	6.61	6.95	6.72
	1994	6.71	7.12	6.89
	1995	6.76	6.88	6.82
	1996	6.31	6.79	6.54
	1997	6.29	7.18	6.72
	1998	6.43	6.98	6.65
	1999	6.78	7.05	6.87
	2000	6.73	6.85	6.80
METALIMNION				
	1988	6.82	7.12	6.94
	1989	6.84	7.36	7.08
	1990	7.28	7.35	7.31
	1991	7.05	7.05	7.05
	1992	7.09	7.31	7.21
	1993	7.05	7.44	7.21
	1994	7.14	7.28	7.22
	1995	7.01	7.03	7.02
	1996	6.41	7.27	6.73
	1997	6.75	7.25	6.98
	1998	7.05	7.47	7.23
	1999	6.93	7.07	7.01
	2000	6.68	7.24	6.94

Table 4.

RUST POND

WOLFEBORO

pH summary for current and historical sampling seasons.
Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
NO END AT CROSS RD				
	1994	7.14	7.14	7.14
	1998	6.83	7.05	6.93
	1999	6.87	6.87	6.87
	2000	6.99	6.99	6.99
NORTH END BEYOND BEA				
	2000	7.07	7.07	7.07
NORTH END INLET				
	1988	6.55	6.55	6.55
	1989	6.84	7.45	7.00
	1990	6.55	7.35	6.82
	1991	6.88	6.88	6.88
	1992	6.91	7.08	6.99
	1993	6.71	6.85	6.79
	1994	6.96	7.02	6.99
	1995	6.69	6.85	6.76
	1996	6.84	6.85	6.84
	1997	6.96	6.96	6.96
	1998	6.96	7.11	7.02
	1999	6.88	6.96	6.92
	2000	6.85	7.08	6.95
OUTLET				
	1988	7.24	7.24	7.24
	1989	6.81	7.54	7.08
	1990	7.22	7.71	7.36

Table 4.

RUST POND

WOLFEBORO

pH summary for current and historical sampling seasons.
Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
	1991	7.15	7.15	7.15
	1992	7.19	7.44	7.27
	1993	6.28	7.40	6.55
	1994	6.97	7.50	7.16
	1995	7.01	7.15	7.07
	1996	6.84	7.26	7.00
	1997	7.23	7.47	7.33
	1998	7.05	7.34	7.21
	1999	7.13	7.15	7.14
	2000	6.97	7.35	7.13
PERRY BROOK				
	1988	6.41	6.98	6.61
	1989	6.73	7.06	6.84
	1990	6.76	7.10	6.93
	1991	6.88	6.88	6.88
	1992	6.99	7.17	7.06
	1993	6.94	7.14	7.02
	1994	6.83	7.27	7.00
	1995	6.77	6.98	6.86
	1996	6.57	6.94	6.74
	1997	6.76	7.03	6.86
	1998	6.87	7.01	6.95
	1999	6.70	7.05	6.81
	2000	6.83	6.97	6.92
PIPE ON SOUTH SIDE				
	2000	6.80	6.80	6.80

Table 4.

RUST POND

WOLFEBORO

pH summary for current and historical sampling seasons.
Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
PLEASANT VALLY RD				
	1998	7.34	7.34	7.34
SO END AT CROSS RD				
	2000	7.04	7.04	7.04

Table 5.

RUST POND

WOLFEBORO

Summary of current and historical Acid Neutralizing Capacity.
Values expressed in mg/L as CaCO .

Epilimnetic Values

Year	Minimum	Maximum	Mean
1988	8.50	9.00	8.75
1989	7.90	8.60	8.20
1990	7.20	9.00	8.10
1991	9.70	9.70	9.70
1992	10.00	10.40	10.17
1993	9.50	11.20	10.30
1994	9.60	11.10	10.57
1995	11.10	11.50	11.30
1996	9.50	10.30	9.80
1997	8.60	11.20	9.93
1998	9.60	10.70	10.10
1999	10.80	13.40	11.77
2000	9.70	10.90	10.43

Table 6.

RUST POND
WOLFEBORO

Specific conductance results from current and historic sampling seasons. Results in uMhos/cm.

Station	Year	Minimum	Maximum	Mean
DAM OUTLET				
	1994	57.8	57.8	57.8
EPILIMNION				
	1988	46.0	46.3	46.1
	1989	46.8	48.0	47.3
	1990	48.8	50.1	49.3
	1991	48.1	48.1	48.1
	1992	52.8	53.4	53.1
	1993	53.2	55.2	54.4
	1994	55.1	58.1	56.6
	1995	53.8	55.4	54.6
	1996	52.1	53.5	52.9
	1997	46.6	47.5	47.0
	1998	44.6	47.5	45.7
	1999	49.7	49.9	49.8
	2000	47.7	51.1	49.9
FRASIERS				
	1998	108.3	108.3	108.3
GRAB SOUTHWEST				
	1998	48.3	48.3	48.3
HYPOLIMNION				
	1988	47.9	49.2	48.6
	1989	48.4	49.6	49.0
	1990	50.1	51.7	50.7
	1991	49.4	49.4	49.4

Table 6.

RUST POND
WOLFEBORO

Specific conductance results from current and historic sampling seasons. Results in uMhos/cm.

Station	Year	Minimum	Maximum	Mean
	1992	51.9	52.8	52.3
	1993	54.7	56.7	55.5
	1994	55.9	56.9	56.5
	1995	53.1	57.0	55.0
	1996	53.0	56.8	54.7
	1997	47.2	49.0	47.7
	1998	48.5	49.1	48.7
	1999	49.7	51.2	50.2
	2000	48.7	52.3	51.0
METALIMNION				
	1988	46.9	47.2	47.0
	1989	46.2	47.9	47.0
	1990	48.9	49.5	49.2
	1991	47.3	47.3	47.3
	1992	52.1	53.8	52.9
	1993	53.5	55.9	54.6
	1994	55.1	57.8	56.3
	1995	53.3	54.8	54.0
	1996	51.8	53.8	52.5
	1997	47.2	48.2	47.8
	1998	45.0	47.6	46.1
	1999	49.2	51.1	50.1
	2000	48.1	51.2	50.1
NO END AT CROSS RD				
	1994	376.0	376.0	376.0
	1997	258.0	258.0	258.0

Table 6.

RUST POND
WOLFEBORO

Specific conductance results from current and historic sampling seasons. Results in uMhos/cm.

Station	Year	Minimum	Maximum	Mean
	1998	217.3	227.3	222.3
	1999	297.0	297.0	297.0
	2000	251.0	251.0	251.0
NORTH END BEYOND BEA				
	2000	250.0	250.0	250.0
NORTH END INLET				
	1988	62.8	62.8	62.8
	1989	47.7	58.7	51.5
	1990	60.2	172.2	102.9
	1991	66.9	66.9	66.9
	1992	80.2	152.9	116.5
	1993	161.8	274.0	202.1
	1994	90.7	216.0	153.3
	1995	70.1	179.4	124.7
	1996	110.0	193.3	151.6
	1997	71.1	215.0	143.0
	1998	193.2	204.0	196.5
	1999	80.7	225.0	152.8
	2000	220.0	245.0	232.5
OUTLET				
	1988	46.8	46.8	46.8
	1989	47.3	48.0	47.7
	1990	48.5	52.6	50.1
	1991	48.5	48.5	48.5
	1992	53.3	54.8	54.0
	1993	54.2	55.9	55.2

Table 6.

RUST POND
WOLFEBORO

Specific conductance results from current and historic sampling seasons. Results in uMhos/cm.

Station	Year	Minimum	Maximum	Mean
	1994	52.5	56.9	54.7
	1995	52.7	56.1	54.4
	1996	51.7	52.9	52.3
	1997	47.2	47.8	47.4
	1998	45.4	48.5	46.5
	1999	50.3	50.5	50.4
	2000	48.4	51.0	50.1
PERRY BROOK				
	1988	35.3	38.3	36.8
	1989	36.2	46.4	39.9
	1990	37.6	43.7	40.0
	1991	41.5	41.5	41.5
	1992	44.5	49.8	47.1
	1993	46.2	54.5	50.5
	1994	38.9	52.3	46.9
	1995	42.3	49.0	45.6
	1996	37.4	47.5	43.7
	1997	38.6	46.4	42.9
	1998	34.3	44.3	38.3
	1999	44.4	50.0	47.1
	2000	36.0	48.3	43.3
PIPE ON SOUTH SIDE				
	2000	46.7	46.7	46.7
PLEASANT VALLY RD				
	1998	147.4	147.4	147.4

Table 6.

RUST POND
WOLFEBORO

Specific conductance results from current and historic sampling seasons. Results in uMhos/cm.

Station	Year	Minimum	Maximum	Mean
RIDING SCHOOL				
	1997	241.0	241.0	241.0
SO END AT CROSS RD				
	2000	253.0	253.0	253.0

Table 8.

RUST POND

WOLFEBORO

Summary historical and current sampling season Total Phosphorus data. Results in ug/L.

Station	Year	Minimum	Maximum	Mean
DAM OUTLET				
	1994	12	12	12
EPILIMNION				
	1988	14	18	16
	1989	1	9	5
	1990	4	11	8
	1991	8	8	8
	1992	7	9	7
	1993	6	10	8
	1994	10	21	17
	1995	1	12	6
	1996	9	10	9
	1997	6	14	10
	1998	7	8	7
	1999	4	11	6
	2000	6	14	8
FRASIERS				
	1998	19	19	19
HYPOLIMNION				
	1988	14	16	15
	1989	1	20	9
	1990	10	46	23
	1991	278	278	278
	1992	9	16	11
	1993	11	20	15

Table 8.

RUST POND

WOLFEBORO

Summary historical and current sampling season Total Phosphorus data. Results in ug/L.

Station	Year	Minimum	Maximum	Mean
	1994	10	11	10
	1995	7	13	10
	1996	10	15	11
	1997	5	19	13
	1998	7	11	9
	1999	8	10	9
	2000	8	12	10
METALIMNION				
	1988	10	20	15
	1989	8	12	10
	1990	3	15	9
	1991	9	9	9
	1992	7	11	8
	1993	6	10	8
	1994	6	8	7
	1995	5	16	10
	1996	11	16	13
	1997	12	16	13
	1998	7	9	7
	1999	6	6	6
	2000	6	17	10
NO END AT CROSS RD				
	1994	24	24	24
	1997	29	29	29
	1998	8	14	11
	1999	20	20	20

Table 8.

RUST POND

WOLFEBORO

Summary historical and current sampling season Total Phosphorus data. Results in ug/L.

Station	Year	Minimum	Maximum	Mean
	2000	12	12	12
NO END AT HORSE FARM				
	1994	425	425	425
NORTH END INLET				
	1988	16	16	16
	1989	7	10	9
	1990	17	78	37
	1991	24	24	24
	1992	11	35	23
	1993	30	51	43
	1994	27	48	37
	1995	1	17	9
	1996	13	17	14
	1997	15	38	26
	1998	11	25	16
	1999	13	14	13
	2000	12	14	13
OUTLET				
	1988	12	12	12
	1989	1	8	5
	1990	1	6	4
	1991	9	9	9
	1992	6	7	6
	1993	5	9	7
	1994	8	15	11
	1995	3	10	6

Table 8.

RUST POND

WOLFEBORO

Summary historical and current sampling season Total Phosphorus data. Results in ug/L.

Station	Year	Minimum	Maximum	Mean
	1996	9	16	11
	1997	6	14	10
	1998	5	8	6
	1999	5	5	5
	2000	5	14	8
PERRY BROOK UPSTREAM				
	1996	10	10	10
PERRY BROOK				
	1988	33	38	35
	1989	7	28	19
	1990	10	29	22
	1991	28	28	28
	1992	17	22	18
	1993	16	35	24
	1994	16	32	25
	1995	15	16	15
	1996	10	21	15
	1997	17	20	18
	1998	9	19	15
	1999	2	22	13
	2000	13	17	15
PIPE ON SOUTH SIDE				
	2000	19	19	19
PLEASANT VALLY RD				
	1998	5	5	5

Table 8.

RUST POND

WOLFEBORO

Summary historical and current sampling season Total Phosphorus data. Results in ug/L.

Station	Year	Minimum	Maximum	Mean
RIDING SCHOOL				
	1997	44	44	44
SO END AT CROSS RD				
	2000	25	25	25

Table 9.

RUST POND

WOLFEBORO

Current year dissolved oxygen and temperature data.

Depth (meters)	Temperature (celsius)	Dissolved Oxygen (mg/L)	Saturation (%)
		May 17, 2000	
0.1	14.5	7.8	76.7
1.0	14.4	7.8	76.5
2.0	14.3	7.8	76.6
3.0	14.2	7.8	76.5
4.0	14.1	7.9	76.9
5.0	12.7	8.4	79.3
6.0	12.7	8.4	79.3
7.0	10.8	8.4	75.3
8.0	9.9	8.2	72.6
9.0	8.7	5.2	45.0
10.0	8.3	5.2	43.9
10.5	8.2	5.0	42.6

Table 10.

RUST POND

WOLFEBORO

Historic Hypolimnetic dissolved oxygen and temperature data.

Date	Depth (meters)	Temperature (celsius)	Dissolved Oxygen (mg/L)	Saturation (%)
June 27, 1988	11.0	8.2	0.7	7.0
July 24, 1989	11.0	8.0	0.7	6.0
September 6, 1990	10.0	9.5	0.0	0.0
July 3, 1991	10.5	10.5	1.2	10.7
July 2, 1992	10.0	9.0	4.4	37.9
June 16, 1993	11.0	10.0	1.9	16.0
June 8, 1994	10.0	11.0	2.8	25.0
May 26, 1995	11.0	9.0	4.3	37.0
May 21, 1996	11.0	9.2	6.7	57.0
June 9, 1997	11.0	11.0	6.7	60.0
August 28, 1997	10.5	10.9	0.7	6.0
May 14, 1998	10.0	8.4	6.9	57.0
May 25, 1999	10.5	8.9	3.1	26.0
May 17, 2000	10.5	8.2	5.0	42.6

Table 11.

RUST POND
WOLFEBORO

Summary of current year and historic turbidity sampling.
Results in NTU's.

Station	Year	Minimum	Maximum	Mean
EPILIMNION				
	1997	0.3	1.0	0.6
	1998	0.3	0.7	0.5
	1999	0.2	0.5	0.3
	2000	0.3	0.5	0.4
FRASIERS				
	1998	0.4	0.4	0.4
GRAB SOUTHWEST				
	1998	0.9	0.9	0.9
HYPOLIMNION				
	1997	0.4	1.0	0.7
	1998	0.3	1.6	0.9
	1999	0.5	1.4	0.9
	2000	0.6	0.7	0.6
METALIMNION				
	1997	0.3	0.7	0.5
	1998	0.5	1.4	0.8
	1999	0.3	0.5	0.4
	2000	0.3	0.7	0.4
NO END AT CROSS RD				
	1997	4.9	4.9	4.9
	1998	0.4	3.2	1.8
	1999	0.7	0.7	0.7
	2000	0.3	0.3	0.3
NORTH END BEYOND BEA				
	2000	8.3	8.3	8.3

Table 11.

RUST POND
WOLFEBORO

Summary of current year and historic turbidity sampling.
Results in NTU's.

Station	Year	Minimum	Maximum	Mean
NORTH END INLET				
	1997	0.4	6.9	3.6
	1998	1.0	6.4	2.7
	1999	0.7	1.8	1.2
	2000	0.6	1.4	1.0
OUTLET				
	1997	0.2	0.8	0.4
	1998	0.3	0.9	0.5
	1999	0.3	0.5	0.4
	2000	0.3	0.5	0.4
PERRY BROOK				
	1997	0.5	1.3	1.0
	1998	0.8	1.6	1.1
	1999	0.9	1.9	1.5
	2000	0.5	1.1	0.9
PIPE ON SOUTH SIDE				
	2000	3.9	3.9	3.9
PLEASANT VALLY RD				
	1998	0.2	0.2	0.2
RIDING SCHOOL				
	1997	6.0	6.0	6.0
SO END AT CROSS RD				
	2000	1.7	1.7	1.7

Table 12.

RUST POND

WOLFEBORO

Summary of current year bacteria sampling.
Results in counts per 100ml.

Location	Date	E. Coli See Note Below
NO END AT CROSS RD		
	May 17	4
NORTH END INLET		
	May 17	6
PIPE ON SOUTH SIDE		
	May 17	0
SO END AT CROSS RD		
	May 17	8

NOTE: "<" means "less than" and ">" means "greater than"